

## **AMENDMENTS TO THE SPECIFICATION:**

Entry of the following amendments to the specification is respectfully requested.

Please replace the paragraph appearing in lines 1-14 of page 5 as follows:

--Tests have shown that the cross sensitivity of the sensor to oxygen is low when there is a partial pressure of oxygen of  $\lambda \geq 1.3$  in measuring gas compartment 22, i.e., at measuring electrode 18. It was determined that with a partial pressure of oxygen of more than  $\lambda \geq 1.3$ , the influence of the oxygen concentration on the measurement for determining the concentration of hydrocarbons is negligible. The measuring electrode 18 is a so-called mixed potential electrode, which catalyzes no, or at least no complete establishment of equilibrium of the gas mixture. Together with reference electrode 19, positioned in reference gas channel 27, measuring electrode 18 forms a so-called mixed potential sensor, which is particularly used for determining hydrocarbons [[carbohydrates]].--.

Please replace the paragraph appearing in lines 16-29 of page 5 as follows:

--The material of measuring electrode 18, which does not, or not completely catalyze the establishment of equilibrium, has the effect that a competing reaction takes place at measuring electrode 18 between the oxygen contained in the gas mixture and the reduced gas components, the [[carbohydrates]] hydrocarbons carried along in the gas to be measured hardly reacting with the free oxygen. In the case of a catalytically active electrode, a reaction of the [[carbohydrates]] hydrocarbons with the oxygen would take place. Preventing this is the function of the not catalytically active mixed potential electrode. As a result, both the free oxygen and the [[carbohydrates]] hydrocarbons reach the three-phase boundary of measuring electrode 18. At reference electrode 19, on the other hand, along with the reference air there is a constant, high partial pressure of oxygen.--.

Please replace the paragraph beginning at line 31 of page 5 as follows:

--At measuring electrode 18, the adsorbed [[carbohydrates]] hydrocarbons now react, and a potential difference develops between measuring electrode 18 and reference electrode 19, which can be read off as electromotive force (emf) by a measuring instrument (not shown).

Thus the emf depends on the concentration of the hydrocarbons contained in the gas mixture. When there is a high concentration of hydrocarbons, there is a high potential difference, and thus a high emf. When there is a low concentration of hydrocarbons, the potential difference between measuring electrode 22 and reference electrode 19 is lower, and as a result, the generated emf is lower too.--.

**AMENDMENTS TO THE TITLE:**

Please change the Title to read as follows: --OXIDIZABLE GAS COMPONENT  
SENSOR AND METHOD OF USING THE SENSOR--.